skills are essential. Typing, filing, recordkeeping, and other clerical skills are also important.

State or local government civil service regulations usually govern police, fire, emergency medical, and ambulance dispatching jobs. Candidates for these positions may have to pass written, oral, and performance tests. Also, they may be asked to attend training classes and attain the proper certification in order to qualify for advancement.

Trainees usually develop the necessary skills on the job. This informal training lasts from several days to a few months, depending on the complexity of the job. Dispatchers usually require the most extensive training. Working with an experienced dispatcher, they monitor calls and learn how to operate a variety of communications equipment, including telephones, radios, and wireless appliances. As trainees gain confidence, they begin to handle calls themselves. Many public safety dispatchers also participate in structured training programs sponsored by their employer. Some employers offer a course designed by the Association of Public Safety Communications Officials. This course covers topics such as interpersonal communications; overview of the police, fire, and rescue functions; modern public safety telecommunications systems; basic radio broadcasting; local, State, and national crime information computer systems; and telephone complaint/report processing procedures. Other employers develop in-house programs based on their own needs. Emergency medical dispatchers often receive special training or have special skills. Increasingly, public safety dispatchers receive training in stress and crisis management, as well as family counseling. Employers are recognizing the toll this work has on daily living and the potential impact stress has on the job, on the work environment, and in the home.

Communications skills and the ability to work under pressure are important personal qualities for dispatchers. Residency in the city or county of employment frequently is required for public safety dispatchers. Dispatchers in transportation industries must be able to deal with sudden influxes of shipments and disruptions of shipping schedules caused by bad weather, road construction, or accidents.

Although there are no mandatory licensing or certification requirements, some States require that public safety dispatchers possess a certificate to work on a State network, such as the Police Information Network. The Association of Public Safety Communications Officials, the National Academy of Emergency Medical Dispatch, and the International Municipal Signal Association all offer certification programs. Many dispatchers participate in these programs in order to improve their prospects for career advancement.

Stock clerks and shipping, receiving, and traffic clerks usually learn the job by doing routine tasks under close supervision. They learn how to count and mark stock, and then start keeping records and taking inventory. Strength, stamina, good eyesight, and an ability to work at repetitive tasks, sometimes under pressure, are important characteristics. Stock clerks, whose sole responsibility is to bring merchandise to the sales floor, stock shelves and racks, need little or no training. Shipping, receiving, and traffic clerks and stock clerks who handle jewelry, liquor, or drugs may be bonded.

Shipping, receiving, and traffic clerks start out by checking items to be shipped and then attaching labels and making sure the addresses are correct. Training in the use of automated equipment is usually done informally, on the job. As these occupations become more automated, however, workers in these jobs may need longer training in order to master the use of the equipment.

Advancement opportunities for material recording, scheduling, dispatching, and distributing workers vary with the place of employment. Dispatchers who work for private firms, which are usually small, will find few opportunities for advancement. Public safety dispatchers, on the other hand, may become a shift or divisional supervisor or chief of communications, or move to higher paying administrative jobs. Some go on to become police officers or firefighters. In large firms, stock clerks can advance to invoice clerk, stock control clerk, or procurement clerk. Shipping, receiving, and traffic clerks are promoted to head clerk and those with a broad understanding of shipping and receiving may enter a related field such as industrial traffic management. With additional training, some stock clerks and shipping, receiving, and traffic clerks advance to jobs as warehouse manager or purchasing agent.

Job Outlook

Overall employment of material recording, scheduling, dispatching, and distributing workers is expected to grow more slowly than the average for all occupations through 2008. However, projected employment growth varies by detailed occupation. Employment of stock clerks, for example, will be affected by increased automation. New technologies will enable clerks to handle more stock, thus holding down employment growth. The effect of automation also will tend to restrict potential employment growth among shipping, receiving, and traffic clerks. Automation in warehouses and stockrooms plus other productivity improvements will enable these clerks to handle materials more efficiently and more accurately than before. Overall employment of dispatchers, on the other hand, is projected to grow about as fast as the average for all occupations. While employment of public safety dispatchers is expected to grow more slowly than average as governments endeavor to combine dispatching services across governmental units and across governmental jurisdictions, average growth is expected among dispatchers not involved in public safety.

Because employment in material recording, scheduling, dispatching, and distributing occupations is substantial, workers who leave the labor force or transfer to other occupations are expected to create many job openings each year.

Earnings

Earnings of material recording, scheduling, dispatching, and distributing occupations vary somewhat by occupation and industry. The range of median hourly earnings in 1998 are shown in the following tabulation.

Production, planning, and expediting clerks	$14.07
Dispatchers, except police, fire, and ambulance	12.68
Meter readers, utilities	12.20
Dispatchers, police, fire, and ambulance	11.38
Procurement clerks	10.88
Shipping, receiving, and traffic clerks	10.82
Weighers, measurers, checkers, and samplers, recordkeeping	10.72
Stock clerks and order fillers	7.94
All other material recording, scheduling, and distribution workers	10.13

Workers in material recording, scheduling, dispatching, and distributing occupations usually receive the same benefits as most other workers. If uniforms are required, employers usually either provide the uniforms, or an allowance to purchase them.

Dispatchers

(O*NET 58002 and 58005)

Nature of the Work

The work of dispatchers varies greatly depending on the industry. Dispatchers keep records, logs, and schedules of the calls they receive, transportation vehicles they monitor and control, and actions they take. They maintain information on each call and then prepare a detailed report on all activities occurring during the shift. Many dispatchers employ computer-aided dispatch systems to accomplish these tasks.

Regardless of where they work, all dispatchers are assigned a specific territory and have responsibility for all communications within this area. Many work in teams, especially in large communications centers or companies. One person usually handles all dispatching calls to the response units or company's drivers, while the other members of the team usually receive the incoming calls and deal with the public.

Police, fire, and ambulance dispatchers, also called public safety dispatchers, monitor the location of emergency services personnel from any one or all of the jurisdiction's emergency services departments. They dispatch the appropriate type and number of units in response to calls for assistance. Dispatchers, or call takers, often are the first people the public contacts when they call for emergency assistance. If certified for emergency medical services, the dispatcher may provide medical instruction to those on the scene until the medical staff arrives.

Usually, dispatchers constitute the communications workforce on a shift. A dispatcher is responsible for communication within an assignment area, while the call takers receive calls and transfer information to the dispatchers. During the course of the shift, personnel will rotate such that the assignment responsibility of the dispatcher will be shared with those in the call taker role.

Police, fire, and ambulance dispatchers work in a variety of settings; they may work in a police station, a fire station, a hospital, or a centralized city communications center. In many cities, the police department serves as the communications center. In these situations, all 911 emergency calls go to the police department, where a dispatcher handles the police calls and screens the others before transferring them to the appropriate service.

When handling calls, dispatchers carefully question each caller to determine the type, seriousness, and location of the emergency. This information is posted either electronically by computer or, with decreasing frequency, by hand, and communicated immediately to uniformed or supervisory personnel. They quickly decide on the priority of the incident, the kind and number of units needed, and the location of the closest and most suitable ones available. Typically, there is a team of call takers who answer calls and relay the information to the dispatchers. Responsibility then shifts to the dispatchers who send response units to the scene and monitor the activity of the public safety personnel answering the dispatch.

When appropriate, dispatchers stay in close contact with other service providers—for example, a police dispatcher would monitor the response of the fire department when there is a major fire. In a medical emergency, dispatchers not only keep in close touch with the dispatched units, but also with the caller. They may give extensive pre-arrival first aid instructions while the caller is waiting for the ambulance. They continuously give updates on the patient's condition to the ambulance personnel, and often serve as a link between the medical staff in a hospital and the emergency medical technicians in the ambulance. (A separate statement on emergency medical technicians and paramedics appears elsewhere in the *Handbook*.)

Dispatchers send response units to the scene and monitor the activity of the public safety personnel answering the call.

Other dispatchers coordinate deliveries, service calls, and related activities for a variety of firms. *Truck dispatchers,* who work for local and long distance trucking companies, coordinate the movement of trucks and freight between cities. They direct the pickup and delivery activities of drivers. They receive customers' requests for pickup and delivery of freight; consolidate freight orders into truckloads for specific destinations; assign drivers and trucks; and draw up routes and pickup and delivery schedules. *Bus dispatchers* make sure local and long distance buses stay on schedule. They handle all problems that may disrupt service and dispatch other buses, or arrange for repairs to restore service and schedules. *Train dispatchers* ensure the timely and efficient movement of trains according to train orders and schedules. They must be aware of track switch positions, track maintenance areas, and the location of other trains running on the track. *Taxicab dispatchers*, or starters, dispatch taxis in response to requests for service and keep logs on all road service calls. *Tow truck dispatchers* take calls for emergency road service. They relay the problem to a nearby service station or a tow truck service and see to it that the emergency road service is completed. *Gas and water service dispatchers* monitor gas lines and water mains and send out service trucks and crews to take care of emergencies.

Employment

Dispatchers held 248,000 jobs in 1998. About one-third were police, fire, and ambulance dispatchers, almost all of whom worked for State and local governments—primarily for local police and fire departments. Most of the remaining dispatchers worked for local and long distance trucking companies and bus lines; telephone, electric, and gas utility companies; wholesale and retail establishments; railroads; and companies providing business services.

Although dispatching jobs are found throughout the country, most dispatchers work in urban areas where large communications centers and businesses are located.

Job Outlook

Overall employment of dispatchers is expected to grow about as fast as the average for all occupations through 2008. In addition to job growth, job openings will result from the need to replace those who transfer to other occupations or leave the labor force.

Employment of police, fire, and ambulance dispatchers is expected to grow more slowly than the average for all occupations. Intense competition for available resources among governmental units should limit the ability of many growing communities to keep pace with rapidly growing emergency services needs. To balance the increased demand for emergency services, many districts are seeking to consolidate their communications centers into a shared, areawide facility, thus further restricting opportunities in this industry. Individuals with computer skills and experience will have a greater opportunity for employment as public safety dispatchers.

Population growth and economic expansion are expected to lead to average employment growth for dispatchers not involved in public safety. Although the overall increase will be about average, not all specialties will be affected in the same way. For example, employment of taxicab, train, and truck dispatchers is sensitive to economic conditions. When economic activity falls, demand for transportation services declines. They may experience layoffs or a shortened workweek, and jobseekers may have some difficulty finding entry-level jobs. Employment of tow truck dispatchers, on the other hand, is seldom affected by general economic conditions because of the emergency nature of their business.

Related Occupations

Other occupations that involve directing and controlling the movement of vehicles, freight, and personnel, as well as information and message distribution, are airline dispatchers, air traffic controllers, radio and television transmitter operators, telephone operators, customer service representatives, and transportation agents.

Sources of Additional Information

For further information on training and certification for police, fire, and emergency dispatchers, contact:

☛ National Academy of Emergency Medical Dispatch, 139 East South Temple, Suite 530, Salt Lake City, UT 84111.
Internet: **http://www.naemd.org**

☛ Association of Public Safety Communications Officials, 2040 S. Ridgewood, South Daytona, FL 32119-2257.
Internet: **http://www.apcointl.org**

☛ International Municipal Signal Association, 165 East Union St., P.O. Box 539, Newark, NY 14513-1526.
Internet: **http://www.imsafety.org**

For general information on dispatchers, contact:

☛ Service Employees International Union, AFL-CIO, CLC, 1313 L St. NW., Washington, DC 20005-4100. Internet: **http://www.seiu.org**

☛ American Train Dispatchers Association, 1370 Ontario St., Cleveland, OH 44113. Internet: **http://www.ble.org/atdd/dwv.html**

Information on job opportunities for police, fire, and emergency dispatchers is available from personnel offices of State and local governments or police departments. Information about work opportunities for other types of dispatchers is available from local employers and State employment service offices.

(See introduction to the section on material recording, scheduling, dispatching, and distributing occupations for information on working conditions, training requirements, and earnings.)

Shipping, Receiving, and Traffic Clerks

(O*NET 58028)

Nature of the Work

Shipping, receiving, and traffic clerks keep records of all goods shipped and received. Their duties depend on the size of the establishment and the level of automation employed. Larger companies typically are better able to finance the purchase of computers and other equipment to handle some or all of a clerk's responsibilities. In smaller companies, a clerk maintains records, prepares shipments, and accepts deliveries. Working in both environments, shipping, receiving, and traffic clerks may lift cartons of various sizes.

Shipping clerks are record keepers responsible for all outgoing shipments. They prepare shipping documents and mailing labels, and make sure orders have been filled correctly. Also, they record items taken from inventory and note when orders were filled. Sometimes they fill the order themselves, obtaining merchandise from the stockroom, noting when inventories run low, and wrapping it or packing it in shipping containers. They also address and label packages, look up and compute freight or postal rates, and record the weight and cost of each shipment. Shipping clerks also may prepare invoices and furnish information about shipments to other parts of the company, such as the accounting department. Once a shipment is checked and ready to go, shipping clerks may move the goods from the plant—sometimes by forklift truck—to the shipping dock and direct its loading.

Receiving clerks perform tasks similar to those of shipping clerks. They determine whether orders have been filled correctly by verifying incoming shipments against the original order and the accompanying bill of lading or invoice. They make a record of the shipment and the condition of its contents. In many firms, receiving clerks use hand-held scanners to record bar codes on incoming products or by entering it into a computer. These data then can be transferred to the appropriate departments. The shipment is checked for any discrepancies in quantity, price, and discounts. Receiving clerks may route or move shipments to the proper department, warehouse section, or stockroom. They may also arrange for adjustments with shippers whenever merchandise is lost or damaged. Receiving clerks in small businesses also may perform duties similar to those of stock clerks. In larger establishments, receiving clerks may control all receiving-platform operations, such as truck scheduling, recording of shipments, and handling of damaged goods.

Shipping, receiving, and traffic clerks are responsible for tracking all outgoing and incoming shipments of goods transferred between businesses, suppliers, and customers.

Traffic clerks maintain records on the destination, weight, and charges on all incoming and outgoing freight. They verify rate charges by comparing the classification of materials with rate charts. In many companies, this work may be automated. Information either is scanned, or is hand-entered into a computer for use by accounting or other departments within the company. Also, they keep a file of claims for overcharges and for damage to goods in transit.

Employment

Shipping, receiving, and traffic clerks held about 774,000 jobs in 1998. Nearly 2 out of 3 were employed in manufacturing or by wholesale and retail establishments. Although jobs for shipping, receiving, and traffic clerks are found throughout the country, most clerks work in urban areas, where shipping depots in factories and wholesale establishments usually are located. (For information shipping, receiving, and traffic clerks working for the U.S. Postal Service, see the statement on postal clerks and mail carriers elsewhere in the *Handbook*).

Job Outlook

Employment of shipping, receiving, and traffic clerks is expected to grow more slowly than the average for all occupations through 2008. Employment growth will continue to be affected by automation, as all but the smallest firms move to hold down labor costs by using computers to store and retrieve shipping and receiving records.